Title (en)

INERTIAL MEASURING DEVICE AND MECHANICAL EQUIPMENT

Title (de)

INERTE MESSVORRICHTUNG UND MECHANISCHE AUSRÜSTUNG

Title (fr)

DISPOSITIF DE MESURE INERTIELLE ET ÉQUIPEMENT MÉCANIQUE

Publication

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Application

EP 18765793 A 20180320

Priority

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- CN 2018079617 W 20180320

Abstract (en)

[origin: EP3683545A1] The present invention relates to an inertial measurement apparatus and a mechanical device. The inertial measurement apparatus includes a PCB board and an inertial measurement unit (IMU). The PCB board includes a PCB body portion and an isolation portion that is formed by slotting a side of the PCB board and fixedly connected to the PCB body portion. The IMU is disposed on the isolation portion. In the present invention, PCB board design of an inertial measurement structure is optimized, so that mechanical stress transferred to the inertial measurement structure is reduced or even eliminated, and IMUs such as a gyroscope and an accelerometer in the inertial measurement structure are less affected by the mechanical stress, which reduces noise and zero offset, helps achieve optimal performance of the gyroscope and the accelerometer, and improves control precision of the inertial measurement structure, being particularly applicable to devices or fields such as gimbals, robots, unmanned aerial vehicles or manned aircrafts.

IPC 8 full level

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CPC (source: CN EP)

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